

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

RECEIVED

04 AUG 2004

WIPO

PCT

| | | |
|---|---|--|
| Applicant's or agent's file reference YU183 | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416). |
| International Application No. PCT/AU2002/000774 | International Filing Date (day/month/year) 14 June 2002 | Priority Date (day/month/year) 12 April 2002 |
| International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ B41J 2/01 | | |
| Applicant SILVERBROOK RESEARCH PTY. LTD. et al | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

- | | | |
|------|-------------------------------------|---|
| I | <input checked="" type="checkbox"/> | Basis of the report |
| II | <input type="checkbox"/> | Priority |
| III | <input type="checkbox"/> | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| IV | <input type="checkbox"/> | Lack of unity of invention |
| V | <input checked="" type="checkbox"/> | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI | <input type="checkbox"/> | Certain documents cited |
| VII | <input type="checkbox"/> | Certain defects in the international application |
| VIII | <input type="checkbox"/> | Certain observations on the international application |

| | |
|---|--|
| Date of submission of the demand 18 July 2002 | Date of completion of the report 22 July 2004 |
| Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929 | Authorized Officer PETER T. WEST Telephone No. (02) 6283 2108 |

I. Basis of the report**1. With regard to the elements of the international application:***

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the claims, pages , as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the drawings, pages , as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☐ the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

| | | |
|-------------------------------|----------------|-----|
| Novelty (N) | Claims 1 to 18 | YES |
| | Claims | NO |
| Inventive step (IS) | Claims | YES |
| | Claims 1 to 18 | NO |
| Industrial applicability (IA) | Claims 1 to 18 | YES |
| | Claims | NO |

2. Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1 JP 2000-293335 A (SEIKO EPSON CORPORATION) 20 October 2000

D2 JP 09-314915 A (CANON KABUSHIKI KAISHA) 9 December 1997

Novelty (N)

Claims 1 to 18 meets the criteria set forth in PCT Article 33(2) for novelty. The prior art published before the priority date does not disclose processing an image for printing where the image data is transformed into print data at a rate of at least one billion pixels per second.

Inventive Step (IS)

The technique described in the specification for achieving the transformation of image data into print data at a rate of at least one billion pixels per second is dividing the image data into portions according to the part of the page width that that part of the image is to be printed on and performing the transformation of each of the portions data in parallel with each other in separate processing devices. Providing processing devices in printers for transforming image data into print data is well known in the printing art, also parallel processing of data is a very well understood technique for achieving very high processing rates.

Both documents D1 and D2 disclose parallel processing of image data for printing.

The basic principle of parallel processing is that the processing speed is proportional to the number of processing devices, and that given the speed of the processors available, a desired processing rate can be achieved by distributing the task to an appropriate number of processors. It is noted that the implementation described in present specification uses only conventionally available hardware and a parallelism of only eight. Therefore it is considered that a person skilled in the art would directly and without difficulty by routine steps arrive at this result and therefore the invention claimed in each of the independent claims lacks an inventive step. It is further considered that the features added by each of the independent claims relate only to parameters or structures that can be arrived at by the application of normal design procedures. These features are merely matters of design choice when the general technical knowledge about the state of the art is used and therefore cannot provide any inventive step.

Therefore the subject matter of these claims 1 to 18 is obvious and does not meets the requirements of Article 33(3) PCT with regard to inventive step.